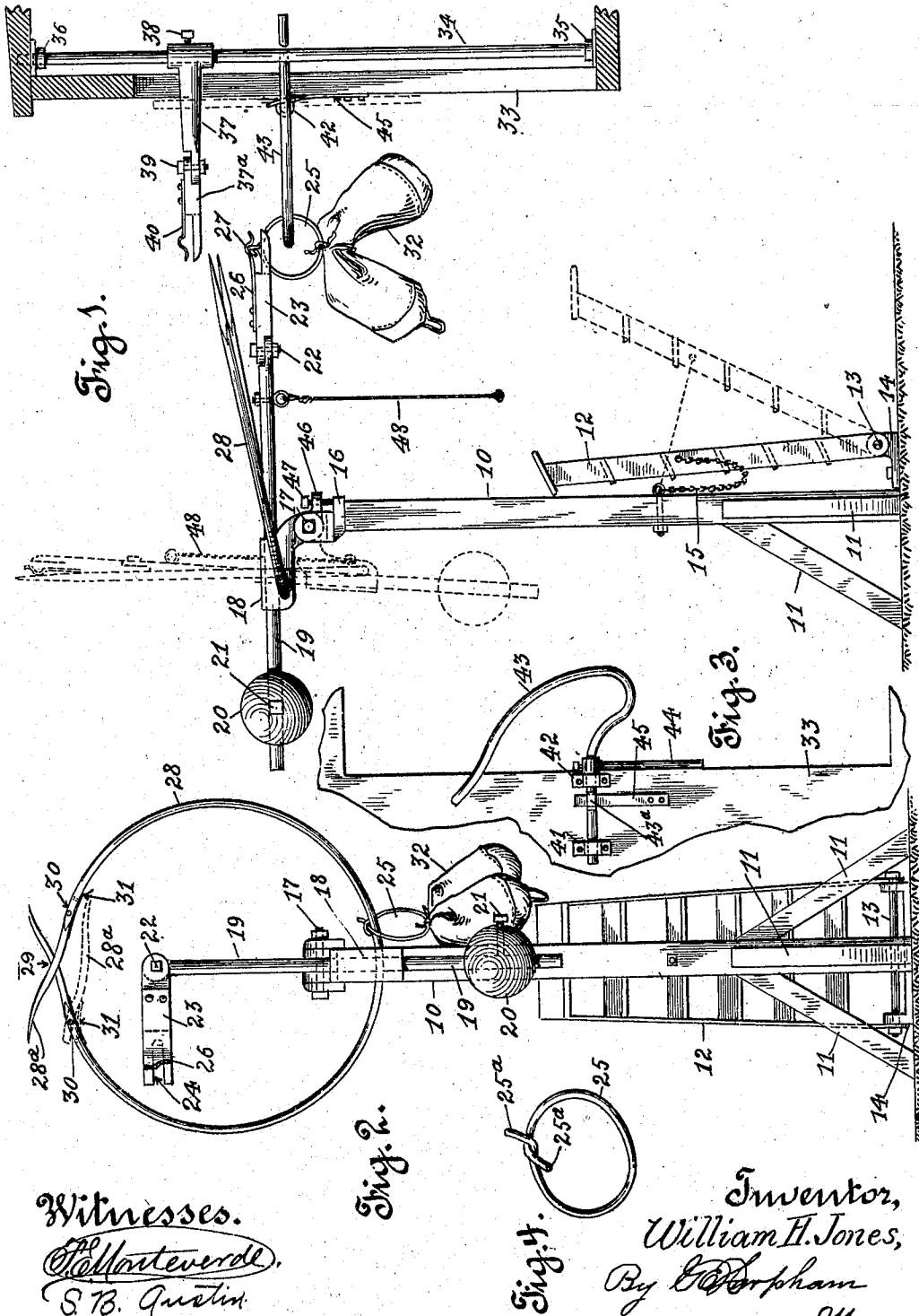


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RECEIVING AND DELIVERING MECHANISM FOR MAIL BAGS.
APPLICATION FILED DEC. 22, 1908.

918,863.

Patented Apr. 20, 1909.

2 SHEETS—SHEET 1.



Witnesses.

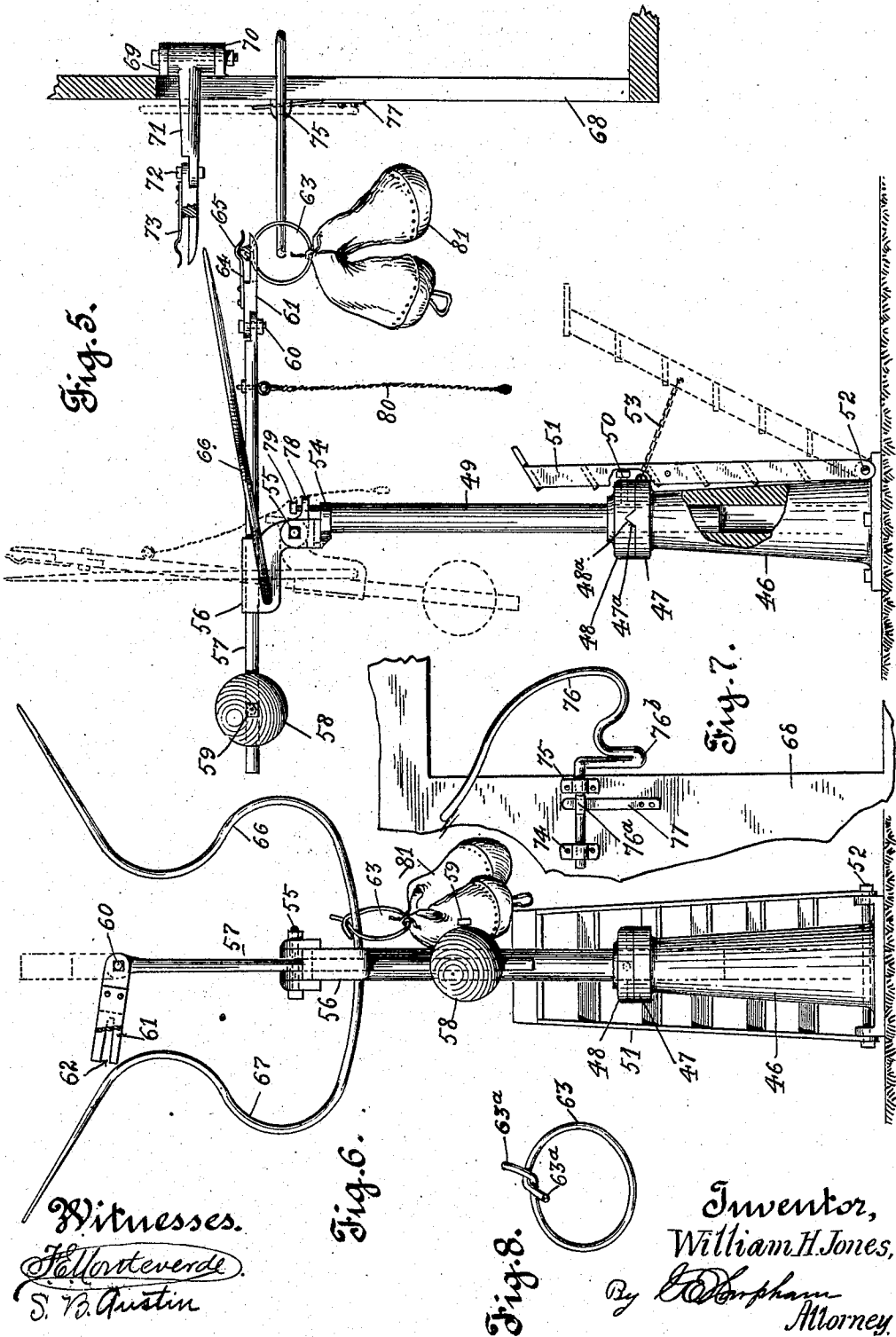
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Witnesses.
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UNITED STATES PATENT OFFICE.

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RECEIVING AND DELIVERING MECHANISM FOR MAIL-BAGS.

No. 918,863.

Specification of Letters Patent.

Patented April 20, 1909.

Application filed December 22, 1908. Serial No. 468,727.

To all whom it may concern:

Be it known that I, WILLIAM H. JONES, a citizen of the United States, residing at Manhattan Beach, county of Los Angeles, and State of California, have invented new and useful Improvements in Receiving and Delivering Mechanism for Mail-Bags, of which the following is a specification.

The object of this invention is to provide simple, durable and economical mail bag delivering and receiving mechanism capable of ready attachment to the mail car, and which will not interfere with the use of the door and can be readily shifted from one side of the car to the other, and also to provide a simple durable and economic mail delivering and receiving mechanism constructed adjacent to a railway track upon which an outgoing mail bag can be secured and when the same is received by the mail car and a mail bag is received from the car the delivering and receiving arms will swing away from the track so as not to lie close enough to the track to endanger a brakeman on a freight train when passing the delivering mechanism or any other person on a train who may be attending to any duties thereon. I accomplish this object by the mechanism described herein and illustrated in the accompanying drawings, in which:

Figure 1 is a side elevation of the mail bag receiving and delivering mechanism adjacent to the track with a mail bag in position thereon and a fragment of a car with the mail bag delivery and receiving mechanism secured thereto, the car receiving mechanism being in position to receive the bag from the track delivering mechanism. Fig. 2 is an end elevation of the track receiving and delivering mechanism after the mail bag has been received thereon and one delivered therefrom. Fig. 3 is a side elevation of a fragment of a car with the mail bag receiving device secured thereto and in its inoperative position. Fig. 4 is a view of the mail bag securing ring. Fig. 5 is a side elevation of a modification of the mail receiving and delivering mechanism adjacent to the track with a mail bag in position thereon and a fragment of a car with a modified form of a mail bag delivering and receiving mechanism secured thereto, the car receiving mechanism being in position to receive the bag from the track delivering mechanism. Fig. 6 is an end elevation of the track delivering

and receiving mechanism shown in Fig. 5 after the mail bag has been received thereon and one delivered therefrom. Fig. 7 is a side elevation of a fragment of a car with a mail bag receiving device secured thereto and in its inoperative position. Fig. 8 is a view of the mail bag securing ring.

In the drawings 10 is a standard which is provided at the bottom thereof with braces 11, a ladder 12 is secured by bolt 13 to the base support 14. When not in use the ladder rests against the standard as shown in Fig. 1. A chain 15 having one end secured to the ladder and the other end secured to the standard provides means to hold the ladder in its operative position for use in placing a mail bag in the device. The position of the ladder in its operative position is shown in dotted lines in Fig. 1. Upon the top of the standard is secured a bearing block 16 to which is pivotally secured by bolt 17 the rearwardly extending head block 18. To this head block is secured the counter balancing shaft 19 which projects on both sides of the standard when the device is in position to deliver a mail bag therefrom as shown in Fig. 1. On the rear end of this shaft is a counter balancing weight 20 which is adjustably secured thereon by set screw 21. To the front end of this shaft is pivotally secured by bolt 22 the mail bag delivering arm 23, which has a rabbet in the top portion in its outer end. The rabbeted portion of the delivery arm has a slot 24 therein in which is received the mail bag securing ring 25. This ring is composed of a piece of heavy resilient wire with the ends 25^a bent at right angles to the plane of the body of the ring and projecting a short distance on either side as best shown in Fig. 4. These ends prevent the ring from slipping through the slot in the delivery arm when a mail bag is in place to be delivered therefrom. Upon the top of the delivery arm is secured a flat spring 26 which has a hump 27 near the outer end thereof, into which hump is received the ends 25^a of the ring, thereby holding the same from accidental displacement from the delivery arm. To the rear end of the head block are rigidly secured the circular mail bag receiving arms 28, the outer ends of which cross each other as best shown in Fig. 2. A short distance beyond the crossing point is a joint 30 which permits the ends of the crossing arm 28^a to turn inwardly as shown in

dotted lines in Fig. 2 when a mail bag 32 is received on the other arm. To the body of the arm is secured a flat spring 31 which projects across the joint and has its free end in contact with the end of the arm to hold same normally in position shown in full lines in Fig. 2. The outer ends of the receiving arms lie in a plane elevated above the delivery arm so that neither arm will interfere with the other when being operated.

Within the car 33 is removably secured a delivery arm standard 34 the ends of which are held in sockets 35 at the bottom of the car and 36 at the top of the car. Socket 36 is long enough and loose enough to permit the standard to be shoved up therein a sufficient distance to enable the bottom thereof to be removed from socket 35, when the standard can be removed to the other side of the car and placed in sockets not shown. Upon this standard 34 is slidably mounted delivery arm 37 which is adjustably secured to the standard by set screw 38 so that the height thereof may be adjusted as required. The outer end 37^a is secured to the inner end by bolt 39 thereby permitting the outer end to move horizontally if desired. The outer end 47^a is rabbeted and provided with a slot the same as arm 23. A spring 40 is secured upon the outer end as shown in Fig. 1, and operates to hold a mail bag securing ring placed in the arm against accidental separation therefrom. In bearings 41 and 42 secured upon the outside of the car is rotatively mounted catcher arm 43 which is provided with a handle 44. Between said bearings is a square portion 43^a and beneath the square portion is a flat spring 45 secured to the side of the car, the free end of which bears against the catcher arm shank and holds the same in its inoperative position as shown in Fig. 3 or in its operative position as shown in Fig. 1. The catcher arm would be at the side of the door toward the front of the train while the delivery arm of the car would be at the other side of the door. The head block is provided with a forwardly projecting lug 46 in which is mounted an adjusting screw 47 the lower end of which contacts with bearing block 16, so as to adjust the position of delivery arm 23 and receiving arm 28. A cord 48 is secured to the counter balancing shaft 19 near the front end thereof so as to enable the operator to draw the same from the inoperative position shown in Fig. 2 down to the operative position shown in Fig. 4 so that he can conveniently place a mail bag ring with a mail bag secured thereto from the ladder when in the position shown in dotted lines.

In the modified form shown in Figs. 5, 6 and 7, 46 is the base portion of the standard, having on the top thereof a cap plate 47. This cap plate has a lug 47^a extending upwardly therefrom which is received in a notch

48^a in the base plate 48 which is secured upon the top member 49 of the standard by set screw 50, thereby permitting the adjustment of the upper portion of the standard to different heights. A ladder 51 is pivoted by bolt 52 to the base of the standard. A chain 53 secured to the standard and to the ladder retains the ladder in the position shown in dotted lines when it is desired to use the same. On the top of the standard is secured the bearing block 54 to which is pivotally secured by bolt 55 the rearwardly extending head block 56. To this head block is secured the counterbalancing shaft 57 which projects on both sides of the standard when the device is in position to deliver the mail bag 81 therefrom as shown in Fig. 5. On the rear end of this shaft is a counter balancing weight 58 which is adjustably secured thereon by set screw 59. To the front of this shaft is secured by bolt 60 the mail bag delivering arm 61 which has a rabbet in the top portion in its outer end. The rabbeted portion of the delivering arm has a slot 62 therein in which is received the mail bag securing ring 63. This ring is composed of a piece of heavy resilient wire with the ends 63^a bent at right angles to the plane of the ring and projecting a short distance on either side as best shown in Fig. 8. These ends prevent the ends from slipping through the slot in the delivery arm when the mail bag 81 is to be delivered therefrom. To the top of the delivery arm is secured a flat spring 64 which has a hump near the outer end thereof into which hump is received the ends 63^a of the ring thereby holding the same from accidental displacement in the delivery arm. To the rear end of the head block is rigidly secured the mail bag receiving arms 66 and 67. These arms curve outwardly and upwardly away from the head block and then inwardly and outwardly as shown in Fig. 6. The outer ends of these receiving arms lie in a plane elevated above the delivery arm so that neither arm will interfere with the other when being operated.

Within the car 68 and secured thereto are brackets 69 and 70 in which is revolubly mounted the car mail bag delivery arm 71 which is composed of two parts pivotally secured together by bolt 72 so that the outer end can swing horizontally when desired. The outer end is rabbeted and provided with a slot the same as arm 61. A spring 73 operates to hold mail bag securing ring 63 when placed in the arm against accidental separation therefrom. In bearings 74 and 75 secured upon the side of the car is rotatively mounted catcher 76, the shank of which projects through said bearings, and between the same is provided a square portion 76^a beneath which is a flat spring 77 which is secured to the body of the car with the free end bearing against the shank to hold it in the

inoperative position shown in Fig. 7, or in the operative position shown in Fig. 5. The catcher is formed of a piece of spring steel which is bent to form a handle 76^b as shown in Fig. 7. The catcher arm would be at the side of the door toward the front of the train while the delivery arm would be at the other side of the door. The head block is provided with a forwardly projecting lug 78 in which is mounted an adjusting screw 79, the lower end of which contacts with bearing block 54 so as to adjust the position of delivery arm 61 and receiving arms 66 and 67. A cord 80 secured to the counter balancing shaft enables the operator to draw the same from the inoperative position shown in Fig. 6 to the operative position shown in Fig. 5 so that he can conveniently place a mail bag ring with a mail bag secured thereto from the ladder when in the position shown in dotted lines. The mail bag 81 is tied to the mail bag securing ring.

By making the mail bag ring of resilient material and turning the ends at right angles to the plane of the body of the ring and crossing the same a mail bag ring is provided which can be twisted off the receiving arms and will then spring back into position for future use without adjustment, thereby providing a cheap and efficient mail bag ring for use in this class of devices.

Having described my invention what I claim is:

1. A device for delivering and receiving mail bags from mail cars comprising a single standard; a rearwardly extending head block pivotally secured to the top of said standard; a counter balancing shaft secured to said head block, said shaft projecting on both sides of the standard when the device is in position to deliver a mail bag therefrom; counter balancing means adjustably secured upon the rear portion of said shaft; a mail bag delivering arm pivotally secured to the front end of said counter balancing shaft, said arm having a vertical slot in the front portion thereof and being rabbeted on the top thereof; a spring secured upon the top and projecting over said slot; receiving arms secured to the rear portion of the head block and extending forwardly and upwardly and terminating in points adapted to enter a mail bag securing ring held on a car coming from either direction;

in combination with a delivering arm secured to a mail car; and a mail bag ring removably fixed to said arm, said ring adapted to carry a mail bag.

2. A device for receiving mail bags from mail cars comprising a standard; a rearwardly projecting head block pivotally connected to said standard; receiving arms secured to the rear portion of said head block, said arms curving outwardly and upwardly away from said head block and then inwardly toward said head block, but above the plane thereof, and then outwardly and away from the plane of said block.

3. In a device for receiving and delivering mail bags of the character described herein, a mail bag ring composed of a body of resilient material having the ends thereof crossed and turned at right angles to the plane of the body of the ring.

4. In a device of the character described herein, a mail bag receiving arm comprising a single piece of resilient material having a straight portion at one end then bent to form a handle then curving away from the straight portion downwardly and then curving upwardly and projecting beyond the line of the straight portion, said straight portion constituting the shank, and being adapted to be secured in bearings affixed to the car body.

5. In a device of the character described herein, a mail bag receiving arm comprising a single piece of resilient material having a straight portion at one end then curving away from the straight portion downwardly and then curving upwardly and projecting beyond the line of the straight portion, said straight portion constituting the shank and being adapted to be secured in bearings affixed to the car body; a handle secured to the shank at its junction with the curved portion; in combination with a car body; bearings secured to said car body adapted to secure the shank of the receiving arm and means to secure the arm from accidentally turning.

In witness that I claim the foregoing I have hereunto subscribed my name this 9th day of December, 1908.

WILLIAM H. JONES.

Witnesses:

G. E. HARPHAM,
S. B. AUSTIN.